# Puget Sound Gateway Program SR 509 Completion Project

**SDOT Freight Advisory Board August 15, 2017** 

THOMAS NOYES SENIOR TRANSPORTATION PLANNER



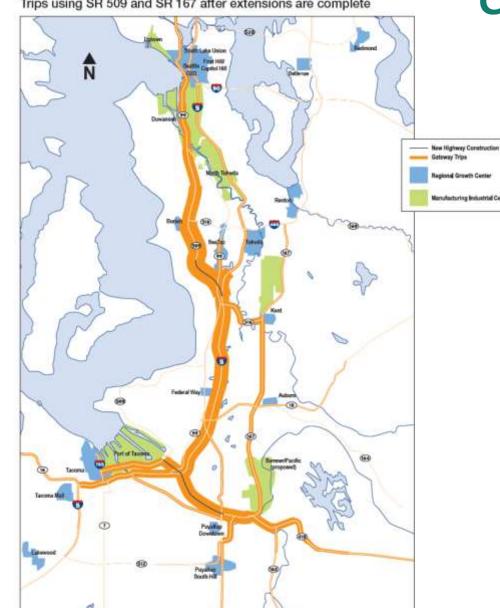
## Puget Sound Gateway Program - SR 509 & SR 167



- Completing the Gateway Program provides more direct links from the state's largest ports to the distribution centers in the region and to Eastern Washington
- Provides direct access to Seattle-Tacoma International Airport from the south for both passenger and air cargo
- Supports community and economic development

### Puget Sound Gateway Travel Patterns Trips using SR 509 and SR 167 after extensions are complete

## **Context for the Program**



- Forecasted travel patterns 2025 & 2045
- Practical design process

### **Puget Sound Gateway Process**

#### **ESHB 2012:**

- For projects identified as
Connecting Washington
projects...The legislature
encourages the department to
continue to institutionalize
innovation and collaboration
in design and project delivery
with an eye toward the most
efficient use of resources.
In doing so, the legislature
expects that, for some
projects, costs will be reduced
during the project design
phase due to the application
of practical design

## WSDOT Executive Order 1096: - WSDOT will design

transportation infrastructure related solutions that are targeted to address the essential needs of a project, not every need. In doing so, designs are developed with criteria that achieve stated performance for the least cost...



**Public** 

**WSDOT** 

### **Legislative Direction - 2015**

In making budget allocations to the Puget Sound Gateway project, the department shall **implement the project's construction as a single corridor investment**.

The department shall develop a coordinated corridor **Construction and Implementation Plan for SR 167 and SR 509 in collaboration with affected stakeholders**.

Specific funding allocations must be based on where and when specific project segments are ready for construction to move forward and investments can be best optimized for timely project completion. Emphasis must be placed on **avoiding gaps in fund expenditures for either project**.

### **Legislative Direction – 2017 Update**

**\$93,500,000** of the Connecting Washington account is provided solely for the SR 167/SR 509 Puget Sound Gateway project. Any savings on the project must stay on the Puget Sound gateway corridor until the project is complete.

The secretary of transportation must develop a memorandum of understanding with local project stakeholders that identifies a schedule for stakeholders to provide local matching funds for the Puget Sound Gateway project. Criteria for eligibility of local match includes matching funds and equivalent in-kind contributions including, but not limited to, land donations. The memorandum of understanding must be finalized by July 1, 2018. The department must submit a copy of the memorandum of understanding to the transportation committees of the legislature and report regularly on the status.

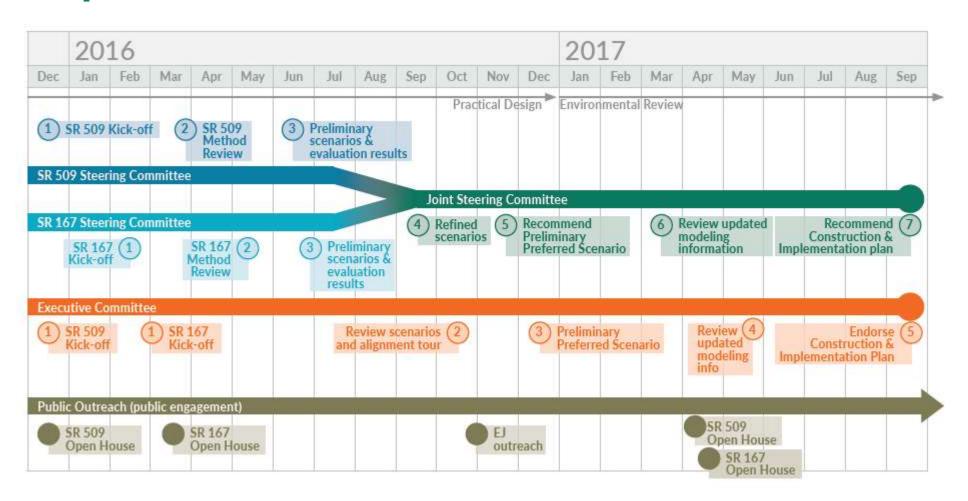


### **Legislative Direction – 2017 Update**

During the course of developing the memorandum of understanding, the department must evaluate the project schedules to determine if there are any benefits to be gained by moving the project schedule forward.

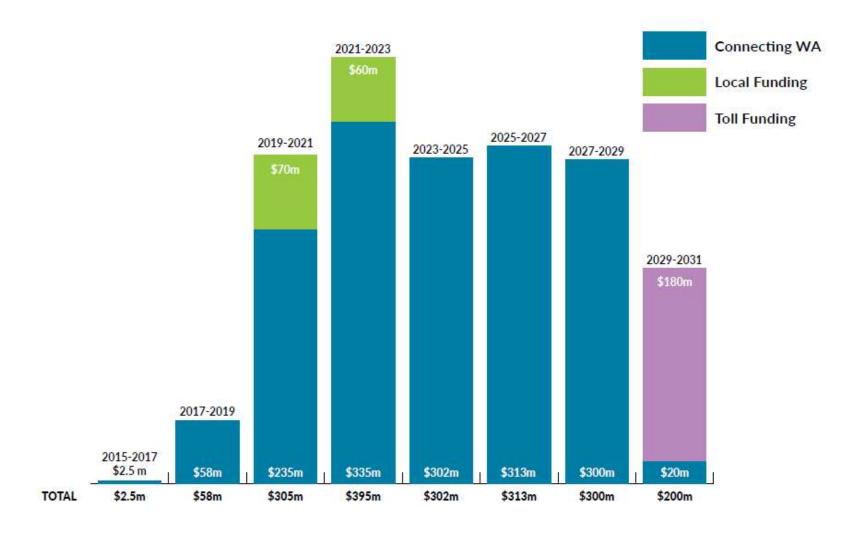
Additionally, the **department must consider** completing a full single-point urban interchange at the junction of state route number 161 (Meridian avenue) and state route number 167 and **a full single-point urban interchange at the junction of state route number 509 and 188th Street**. If the department receives additional funds from an outside source for this project, the funds must be applied toward the completion of these two full single-point urban interchanges.

# Program Schedule to Construction and Implementation Plan



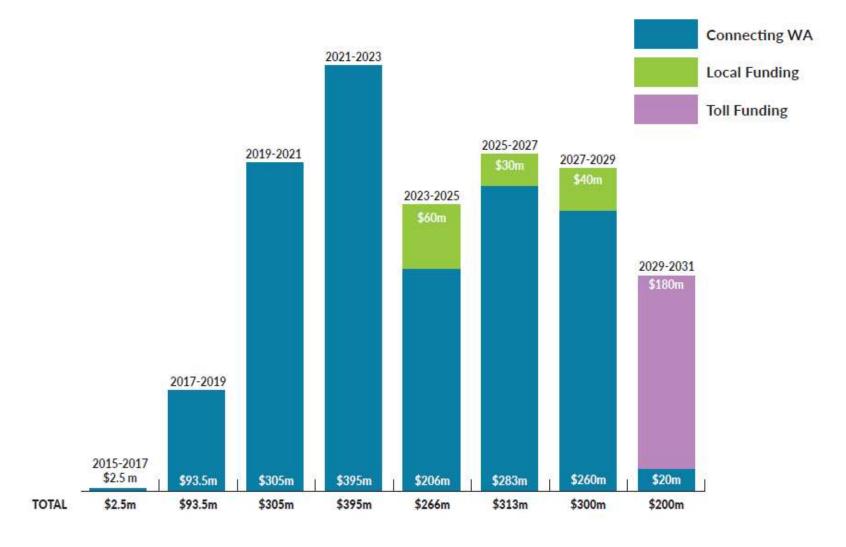
### **Puget Sound Gateway Funding**

as enacted by the 2015 Legislature

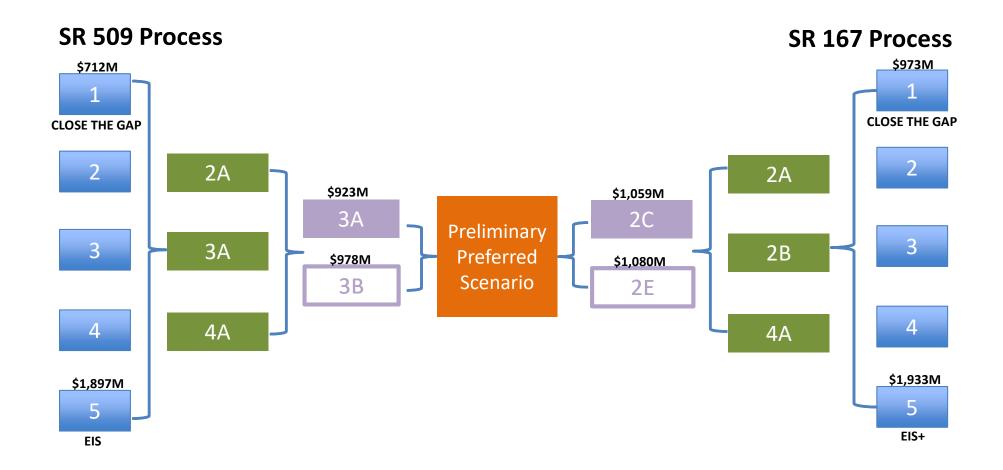


### **Puget Sound Gateway Funding**

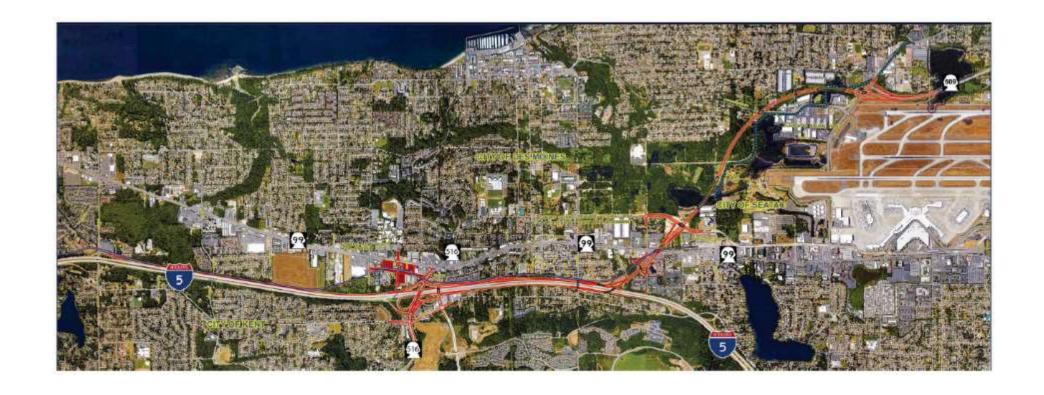
as enacted by the 2017 Legislature



### **Scenario Refinement Process**



### **Scenario 3A**

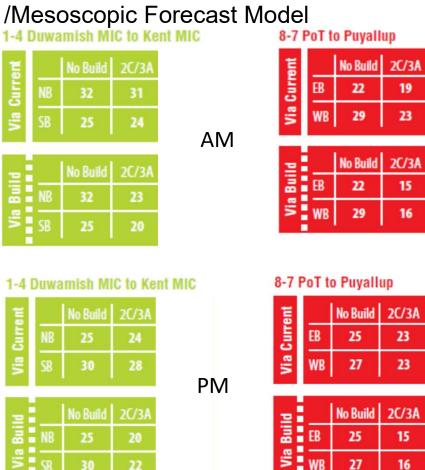


# **Forecasted Traffic Operations**



### **Port Access Travel Times**

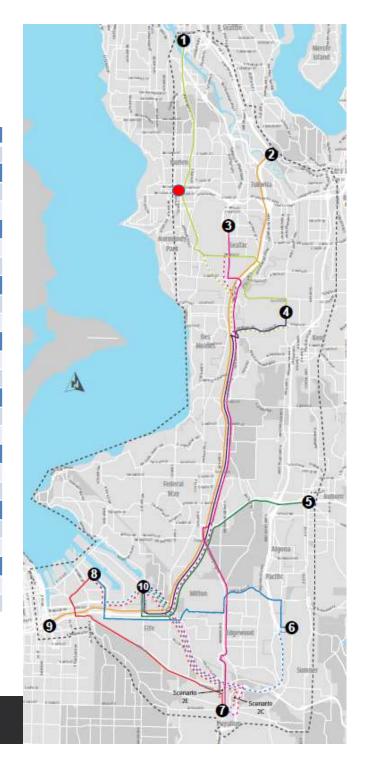
- 2045 Peak projected travel times (minutes) for select routes
- Using Dynamic Traffic Assignment (DTA)
   /Mesoscopic Forecast Model



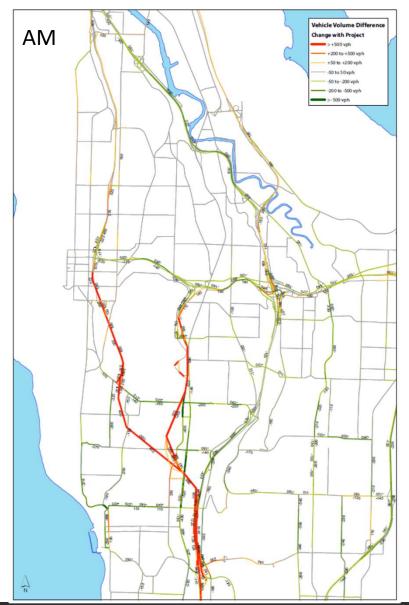
### **Burien Travel Times - 2045**

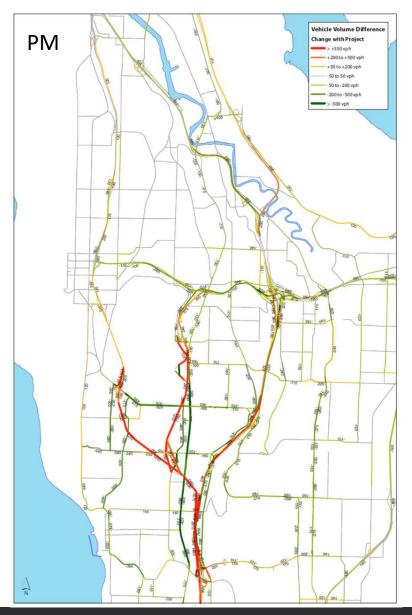
Trip Pair   No Build   2E/3A Tolled   Burien to Duwamish		AM Peak Hour		PM Peak Hour		
Northbound         13         13         8         9           Southbound         8         8         9         10           Burien to SeaTac         Eastbound         8         7         7         7           Westbound         8         7         8         8           Burien to Tukwila         Eastbound         7         6         8         8           Burien to Kent         Northbound         23         13         19         14           Southbound         21         12         24         13           Burien to Renton         Eastbound         10         11         23         22           Westbound         11         10         10         14           Burien to Auburn         Northbound         37         25         32         23           Southbound         31         21         40         25           Burien to Puyallup         37         44         29           Southbound         39         25         63         30           Burien to Port of Tacoma         Northbound         50         30         61         24	Trip Pair	No Build	2E/3A Tolled	No Build	2E/3A Tolled	
Southbound         8         9         10           Burien to SeaTac         Eastbound         8         7         7         7           Westbound         8         7         8         8           Burien to Tukwila         Eastbound         7         6         8         8           Burien to Kent         8         8         8         8           Burien to Kent         9         10         14         15           Westbound         7         6         8         8         8           Burien to Kent         8         13         19         14         14         14         14         14         14         14         15         14         15         14	Burien to Duwamish					
Burien to SeaTac	Northbound	13	13	8	9	
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Eastbound       7       8       18       15         Westbound       7       6       8       8         Burien to Kent       Northbound       23       13       19       14         Southbound       21       12       24       13         Burien to Renton       Eastbound       10       11       23       22         Westbound       11       10       10       14         Burien to Auburn       Northbound       37       25       32       23         Southbound       31       21       40       25         Burien to Puyallup       Northbound       61       37       44       29         Southbound       39       25       63       30         Burien to Port of Tacoma       Northbound       50       30       61       24	Westbound	8	7	8	8	
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Burien to Kent   Northbound   23   13   19   14   Southbound   21   12   24   13   Burien to Renton	Eastbound	7	8	18	15	
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Southbound     21     12     24     13       Burien to Renton       Eastbound     10     11     23     22       Westbound     11     10     10     14       Burien to Auburn       Northbound     37     25     32     23       Southbound     31     21     40     25       Burien to Puyallup       Northbound     61     37     44     29       Southbound     39     25     63     30       Burien to Port of Tacoma       Northbound     50     30     61     24	<b>Burien to Kent</b>					
Burien to Renton         Eastbound       10       11       23       22         Westbound       11       10       10       14         Burien to Auburn         Northbound       37       25       32       23         Southbound       31       21       40       25         Burien to Puyallup       25       63       30         Southbound       39       25       63       30         Burien to Port of Tacoma       30       61       24	Northbound	23	13	19	14	
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Burien to Auburn         Northbound       37       25       32       23         Southbound       31       21       40       25         Burien to Puyallup       Northbound       61       37       44       29         Southbound       39       25       63       30         Burien to Port of Tacoma       Northbound       50       30       61       24	Eastbound	10	11	23	22	
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Burien to Puyallup           Northbound         61         37         44         29           Southbound         39         25         63         30           Burien to Port of Tacoma         8         0         61         24           Northbound         50         30         61         24	Northbound	37	25	32	23	
Northbound       61       37       44       29         Southbound       39       25       63       30         Burien to Port of Tacoma         Northbound       50       30       61       24	Southbound	31	21	40	25	
Southbound         39         25         63         30           Burien to Port of Tacoma         Southbound         50         30         61         24	<b>Burien to Puyallup</b>					
Burien to Port of Tacoma Northbound 50 30 61 24	Northbound	61	37	44	29	
Northbound 50 30 61 24			25	63	30	
	Burien to Port of Tacoma					
Southbound         30         21         38         26	Northbound	50	30	61	24	
	Southbound	30	21	38	26	

(in minutes)



# **2045 Traffic Volume Changes**

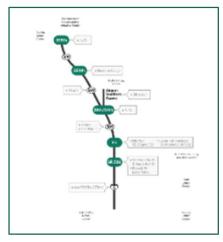




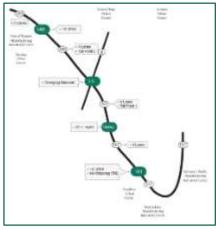


# **Gateway Phasing Preliminary Preferred Scenario**

PHASE 1 (to 2031)



SR 509: 3A \$923m



SR 167: 2C \$1,059m

Connect WA \$1,565m Toll \$180m Local \$130m FASTLANE \$114m

### PHASE 2 (future)

### **Local Access**

- Meridian Interchange (west half)
- 188<sup>th</sup> Interchange (south half)
- 200<sup>th</sup> Interchange
- Valley Interchange (east half)

#### **I-5**

- SR 167 SR 18 NB auxiliary lane
- 272<sup>nd</sup> SR 516 NB auxiliary lane
- SR 516 SR 509 NB collector/distributor lanes

### HOV

- SR 509 HOV (fifth and sixth lanes)
- SR 509 HOV Direct Access Ramps
- SR 167 HOV (fifth and sixth lanes)
- SR 167 HOV Direct Access Ramps

## Forward Compatibility (features that could be constructed in Phase 1 that are needed in Phase 2)

- SR 509
- Sea-Tac Airport South Access Expressway
- I-5
- SR 167



## **Preliminary SR 509 Construction Staging**



### **April Public Outreach**

- Two open houses:
  - 30,000 postcards were sent in addition to emails to the project listservs and press releases.
  - April 12 SR 509 Open House at Tyee Education Complex
  - April 18 SR 167 Open House at Fife High School
  - Approximately 300 people attended the open houses.
  - Overall, attendees were supportive of the program and projects.
  - Concerns centered around environmental impacts, tolling and duration for implementation.





### More information:

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